Corrected Table 3-2

Table 3-2: Summary of Retrospective Biomonitoring & Passive Dosimetry Analyses Based On PHED & Agency Risk Assessments

Study Citation	Chemical	Application rate from study	Application equipment	Dermal absorption	PPE worn	Ratio Passive Dosimetry (dermal + inhalation) / Biomonitoring	
Scott, R.C.; Chester, G.; Hart, T.B.; Woolen, B.H.; Ward, R.J.; Laird, W.J.D. (1983). Fluazifop-butyl: a spray trial to assess knapsack spraying.	fluazifop-butyl	5 g/L = 0.042 lb ai/gal and 21.38 gal/A = 0.898 lb ai/A	knapsack sprayer	2% (high exposure) and 9% (low exposure) from D316892	T-shirts, shorts and shoes	(1)[a] 2% dermal absorption:	0.11
						(2) 9% dermal absorption:	0.42
Findlay, M.L. (1997). Molinate; Biological Monitoring of Workers During Loading of Arrosolo 3-3E into Airplane Hoppers	molinate	states max rate as 4 lb ai/A for product; average gallons handled provided for each worker level	M/L for aerial application	40%	All mixer loaders wore chemical resistant gloves, half-face respirator and chemical resistant footwear. Additional protection consisted of one of the following: (1) Level 1: Activated carbon suit worn underneath 'Kleenguard' coveralls; (2) Level 2: 'Kleenguard' coveralls worn over normal work clothing and (3) Level 3: Normal work clothing, recommended as long sleeved shirt and long trousers.	(3) SL w/gloves:	w.s 0.03 * 4.2
						(4) DL w/gloves:	w.s 0.01 * 6.4
Barney, W.P. (2001). Occupational Exposure Monitoring of Aerial Mixing/Loading of PENNCAP M® Utilizing Biological Monitoring	methyl parathion	1 lb ai/A	aerial	6%	M/L: Long sleeved shirt, long pants, coveralls, socks, rubber boots, goggles, dust/mist respirator, and neoprene gloves	(5) Ratio of unit exposures (dermal + inhalation PHED and 90th percentile biomonitoring UE):	19.5
Siemer, S.R. (1995). The Evaluation of Worder Exposure During Loading and Spray Application of Dormex to Dormant Grapevines	hydrogen cyanamide	biomonitoring study rate= 8.7 to 21.6 lb ai/A; application rates used in risk assessment for hydrogen cyanamide taken from labels: peach=12.9 lb ai; grape=17.2 lb ai; apple=34.4 lb ai	closed-cab over-the-row sprayer	11% (from D306179)	Applicators only: chemical resistant rainsuits, gloves, rubber boots, long sleeve-shirt, long pants, respirators	(6) Ratio of unit exposures assuming groundboom equipment (dermal + inhalation PHED and geomean biomonitoring UE):	3.02
						(7) Ratio of unit exposures assuming airblast equipment (dermal + inhalation PHED and geomean biomonitoring UE):	17.6
Hicks, S.C. (1998). The Evaluation of Spray Applicator Exposure During Airblast Spray Application of Dormex® to Dormant Fruit Trees	hydrogen Cyanamide	biomonitoring study rate= 11.2 to 26.6 lb ai/A application rates used in risk assessment for hydrogen cyanamide taken from labels: peach=12.9 lb ai; grape=17.2 lb ai; apple=34.4 lb ai	open-cab airblast	11% (from D306179)	Applicators only: chemical reistant rainsuits, gloves, rubber boots, long sleeve-shirt, long pants, respirators	(8) Ratio of unit exposures (dermal + inhalation PHED and geomean biomonitoring UE):	16.4

Corrected Table 3-2

FIFRA SAP Meeting 1/10/07 – Worker Exposure Methods

Molinate ratios changed (3) 0.03 to 4.2

because of math error (4) 0.01 to 6.4